



STATE OF MARYLAND

# DHMH

**Maryland Department of Health and Mental Hygiene**  
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**June 29, 2007**

**Public Health & Emergency Preparedness Bulletin: # 2007:25**  
**Reporting for the week ending 06/23/07 (MMWR Week #25)**

**Current Threat Levels:**

**National:** Yellow (ELEVATED) \*The threat level in the airline sector is Orange (HIGH)  
**Maryland:** Yellow (ELEVATED)

**REVIEW OF DISEASE SURVEILLANCE FINDINGS**

**COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):**

<b>Meningitis:</b>	<b><u>Aseptic*</u></b>	<b><u>Meningococcal*</u></b>	<b>*(non-suspect cases)</b>
New cases:	* Data not yet released from Division of Communicable Disease Surveillance		
Prior week:	* Data not yet released from Division of Communicable Disease Surveillance		
Week#25, 2006:	8	-	

**OUTBREAKS: 3 outbreaks were reported to DHMH during MMWR Week 25 (June 17-June 23, 2007)**

**2 Foodborne Gastroenteritis outbreaks**

1 outbreak of FOODBORNE GASTROENTERITIS associated with a Restaurant

1 outbreak of FOODBORNE GASTROENTERITIS associated with a Private Club

**1 Rash illness outbreak**

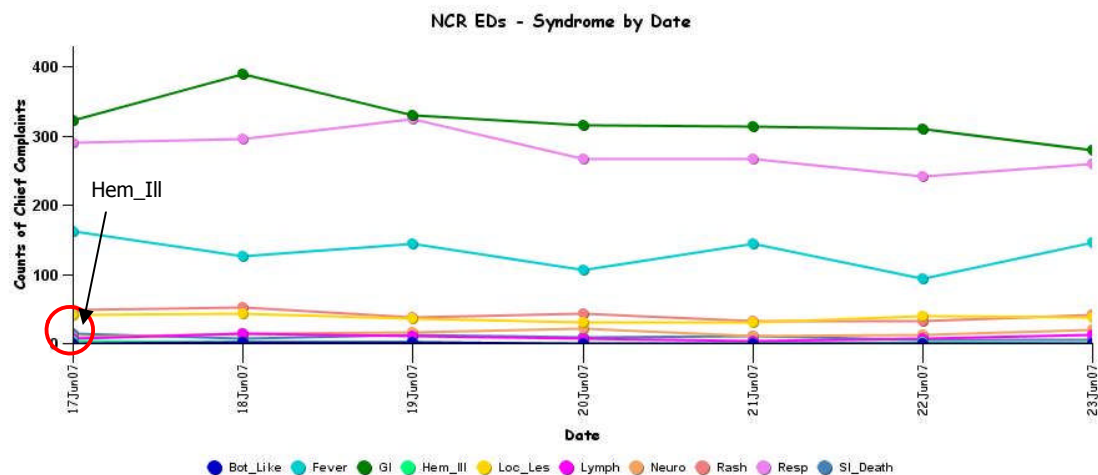
1 outbreak of SCABIES associated with an Organization

## **SYNDROMIC SURVEILLANCE REPORTS:**

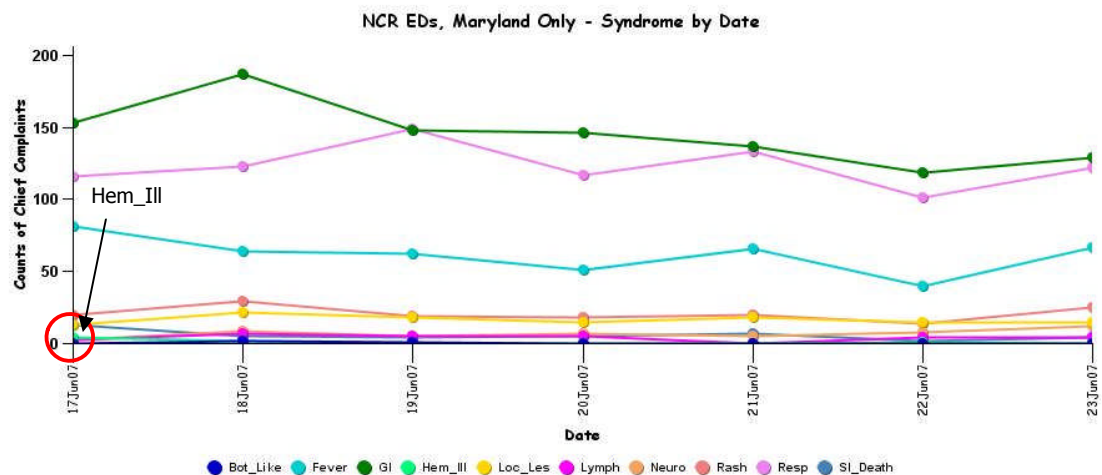
### **ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):**

Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts only.

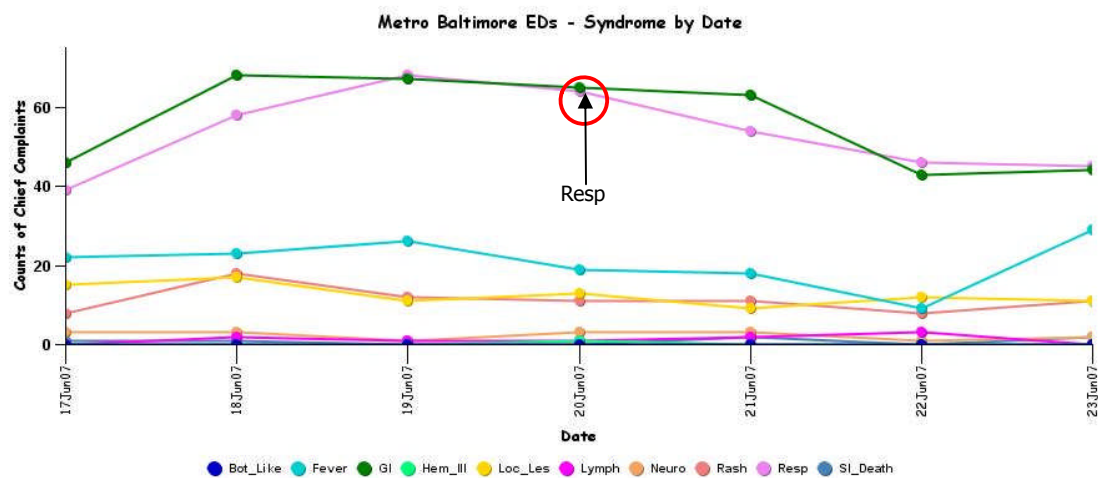
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness. \* Note: ESSENCE – ANCR Spring 2006 (v 1.3) now uses syndrome categories consistent with CDC definitions.



\* Includes EDs in all jurisdictions in the NCR (MD, VA, DC) under surveillance in the ESSENCE system

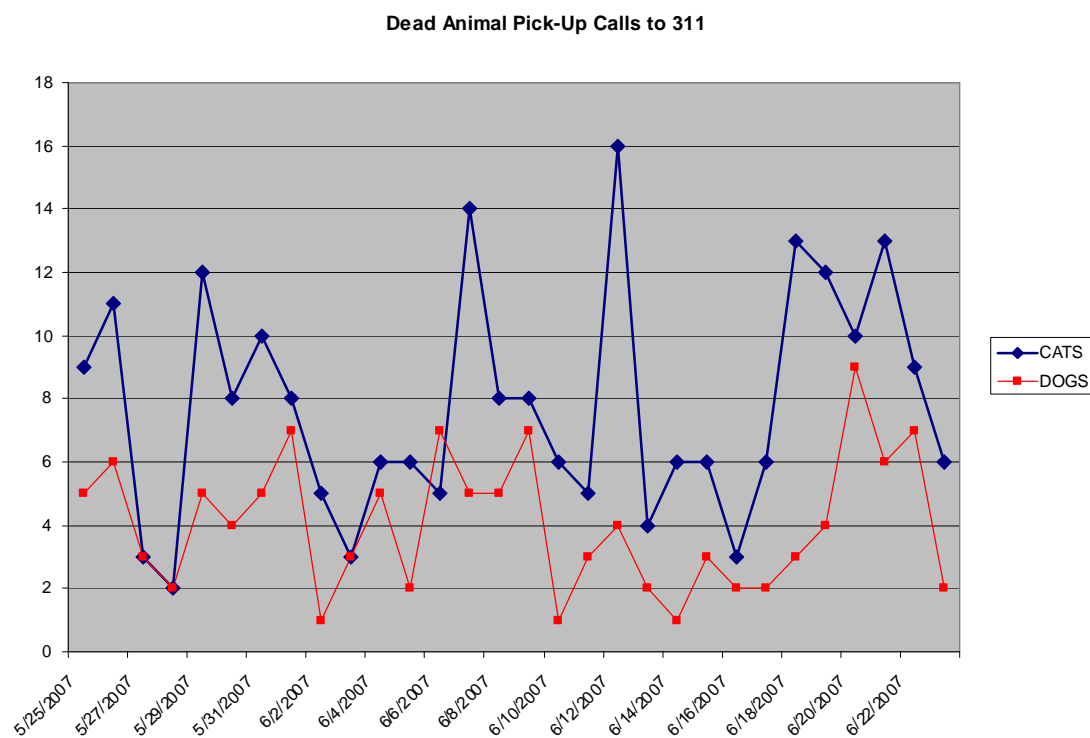


\* Includes only Maryland EDs in the NCR (Prince George's and Montgomery Counties) under surveillance in the ESSENCE system



\* Includes EDs in the Metro Baltimore region (Baltimore City and Baltimore County) under surveillance in the ESSENCE system.

**Baltimore City Syndromic Surveillance Project:** No suspicious patterns in the medic calls, ED Syndromic Surveillance and the animal carcass surveillance. Graphical representation is provided for animal carcass surveillance 311 data.

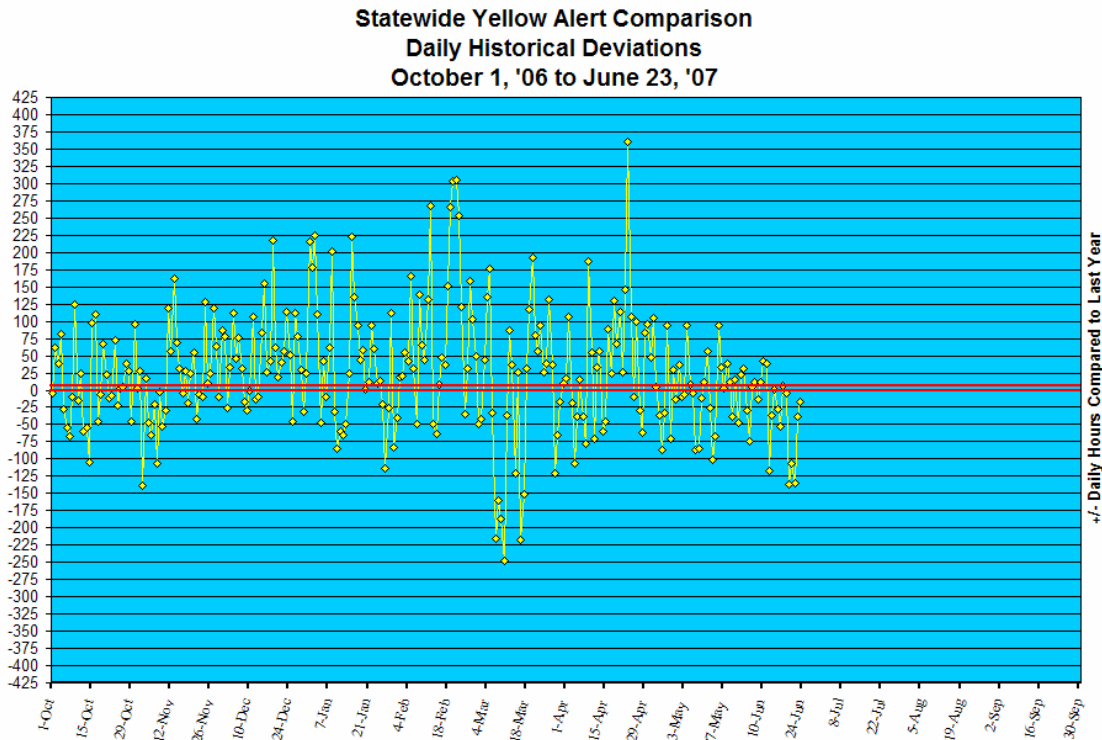


**REVIEW OF MORTALITY REPORTS:**

**OCME:** OCME reports no suspicious deaths related to BT for the week

**REVIEW OF EMERGENCY DEPARTMENT UTILIZATION**

**YELLOW ALERT TIMES (ED DIVERSION):** The reporting period begins 10/01/06.

**NATIONAL DISEASE REPORTS:**

**BRUCELLOSIS, CANINE (Washington):** 19 Jun 2007, In rural Lewis County, a woman with dozens of animals appears to be violating a public health quarantine. Some of the woman's animals tested positive for a contagious animal disease last month. Even though a quarantine is in place, the woman admits to allowing animals to come and go from her property. The woman has nearly 100 dogs on her property. She says she sells animals to pay for their food and care, and she admits that despite this quarantine, animals are still flowing in. Last month, police and health officials swept through the property and euthanized 41 dogs after turning up a contagious animal disease called brucellosis. Investigators considered Hutton's treatment of the animals neglectful. They removed horses and ask the prosecutor to file charges. There is a quarantine filed by health officials. The order says "no animals" may enter or leave. Still, Hutton admits she's accepted dogs that have been dropped off, and a horse showed up after the quarantine. Hutton claims the quarantine doesn't apply to horses. "If there is a horse on the property, that would be a violation of the quarantine order," said Lewis County Prosecutor Michael Golden. The prosecutor says he plans to look into this and if he finds the quarantine has been violated, he'll seek a civil court order enforcing the quarantine. He also says sometime next week he plans to file charges against Hutton for animal neglect to her horses. (Brucellosis is listed in Category B on the CDC list of Critical Biological Agents)\* Non-suspect case

**ESCHERICHIA COLI O157, RESTAURANT, CAPRINE ORIGIN SUSPECTED (North Carolina):** 20 Jun 2007, Health officials closed a China Grove, NC, restaurant linked to a deadly Escherichia coli outbreak on Jun 18 after learning some employees slaughtered a goat there in May. At a news conference, Rowan County Health Director Leonard Wood said that on Jun 15 a former employee of Captain's Galley Seafood Restaurant in China Grove told health officials a goat had been slaughtered in the kitchen. Wood said the restaurant's owners confirmed the goat slaughter. News of the slaughter was "very disturbing" to him and the restaurant's owners, Wood said. "They don't know if or when the restaurant will reopen," he said. On Jun 14, an 86-year-old Salisbury resident died at Rowan Regional Medical Center of complications related to an infection of a dangerous strain of the bacterium E. coli O157:H7. She was one of 21 people who got sick after eating at the restaurant. Health officials said they interviewed 26 employees and heard conflicting

stories. The goat was slaughtered sometime between May 11 and 20, Wood said. Restaurant patrons got sick between May 26 and Jun 3, Wood said. Health officials cannot prove the outbreak of the intestinal disease was caused by the goat slaughter, Wood said. It will be hard to establish a link without finding part of the goat carcass. Greensboro lawyer David Brown, who represents the restaurant owner, said he believes 2 or 3 employees were involved. Brown said he was told the goat wasn't killed "for some religious or cultural reason, but simply a desire to cook the goat and eat it." Brown also said the employees bought the goat from a local farmer and brought it into the restaurant after hours, Brown said. The employees killed the goat in the kitchen, but took it elsewhere to cook, Brown said. The attorney said the employees didn't use the restaurant's utensils. Health officials announced the E. coli outbreak on Jun 7. Officials said they learned of another suspected case of E. coli on June 18, bringing the total to 8 confirmed cases and 13 suspected cases. (Food Safety Threats are listed in Category B on the CDC list of Critical Biological Agents)\* Non-suspect case

**HANTAVIRUS (New Mexico):** 21 Jun 2007, Hantavirus is also starting to crop up around the state, said Terry Yates, an expert on the disease at the University of New Mexico (UNM). "We had a case at UNM Hospital just this past weekend," (Jun 16-17) Yates said. "The rodent numbers last month when we sampled were extremely high, and virtually all the deer mice we caught were pregnant." Hantavirus is carried mainly by deer mice and a handful of other rodents. It spreads to humans through contact with infected urine, droppings, and saliva. Symptoms include fatigue, fever, muscle aches, chills, abdominal problems, and eventually shortness of breath as the lungs fill with fluid. The number of cases of the disease will likely grow in coming months and appear in a broader range of counties, Yates said. "Plague and hantavirus are still in the moderate range, but we're seeing it in a larger geographic area. But next year, unless something dramatic happens with the weather, we could see the situation get much worse. We think it's going to escalate substantially," Yates said. (Emerging Infectious Diseases are listed in Category C on the CDC list of Critical Biological Agents)\* Non-suspect case

**TULAREMIA, RABBITS (New Mexico):** 22 Jun 2007, Abundant rains have left the New Mexico wild areas teeming with rodents, including rats, squirrels, and rabbits, raising the threat for a host of rodent-borne diseases, said Mark DiMenna, environmental health supervisor for the city. Tularemia is rapidly moving through the growing rabbit population, killing them in droves, although it's not making a big dent in their populations, said DiMenna and Paul Ettestad, the state public health veterinarian. "There's been a lot of rabbit die-off in our north central counties here," Ettestad said. "We've had dead rabbits in several counties, including Santa Fe and Bernalillo, and dogs and cats have tested positive in 7 counties." Tularemia, also known as rabbit fever, is a potentially fatal flu-like disease in humans characterized by sudden fever, chills, headache, diarrhea, muscle aches, joint pain, dry cough, and progressive weakness. It can spread by handling an infected carcass; being bitten by an infected tick or flea; eating or drinking contaminated food or water; or breathing in the bacteria. On the plus side, at least, it doesn't spread from person to person. And so far, there haven't been any human cases this year in New Mexico, Ettestad said. "But don't let the lack of cases fool you. Tularemia and other diseases are out there", Ettestad and DiMenna said. In the Albuquerque area, tularemia-infected rabbits have been found in areas east of Tramway Boulevard and northeast of Eubank Boulevard, DiMenna said. "We have picked up so many rabbits this year, we've lost count," DiMenna said. (Tularemia is listed in Category A on the CDC list of Critical Biological Agents)\* Non-suspect case

#### **INTERNATIONAL DISEASE REPORTS:**

**CHOLERA (Somalia):** 17 Jun 2007, At least 25 people died from watery diarrhea while dozens more, most of them children, were ailing from the disease in Mudug provincial settlements of Haradheere in central Somalia. Omar Abdulahi, an intellectual in the area, told Shabelle that the plague infected a large number of children and older people in the region. "In the past days at least 25 have died. People in the settlements where the disease is prevailing are very much concerned because we feel that the epidemic is rapidly spreading," he said. Abdulahi said medical officers and clinics were very scarce in the settlements, calling on local and international aid agencies to bring an immediate medical assistance to the region. (Water Safety Threats are listed in Category B on the CDC list of Critical Biological Agents)\* Non-suspect case

**SALMONELLOSIS, SEROTYPE ENTERITIDIS, MAYONNAISE (Jordan):** 20 Jun 2007, Following alarm caused by an outbreak of salmonella poisoning in Jordan involving 300 people, the Jordanian Ministries of Agriculture and Health quickly organized a seminar in Amman for table egg and broiler producers. The outbreak was caused by Salmonella Enteritidis following the consumption of homemade mayonnaise from local fast food outlets, known as "Shawerma" outlets, prepared under questionable hygiene conditions. Such was the importance attached to this event, in addition to major poultry integrators, it was attended by 10 veterinarians involved in zoonosis and veterinary services from the Ministry of Agriculture, Professor Kalel Shawbka from the University of Jordan and Dr Mohamed Al Nator from Jordan University of Science and Technology, as well as veterinarians and advisers from the private sector. (Food Safety Threats are listed in Category B on the CDC list of Critical Biological Agents)\* Non-suspect case

**CRIMEAN-CONGO HEMORRHAGIC FEVER (Russia):** 21 Jun 2007, The incidence of Crimean-Congo hemorrhagic fever (CCHF) in Stavropol is 2 times higher than it was last year. The situation is estimated by experts as unfavorable. As of Jun 13, there were 23 registered cases of CCHF in 12 districts of Stavropol: 5 cases in Neftekumsk district, 4 in the Apansenskoy region, 2 each in Budenovskiy, Ipatovskiy, Krasnogvardeyskiy, Levokumskiy, and one each in Aleksandrovskiy, Arzgirskiy, Blagodarnenskiy, Izobilnenskiy, Kurskiy, and Novoselitskiy districts. 73 percent of the cases were infected through contact with animals and 27 percent in natural conditions (in the fields). 16 people were bitten by ticks, and 5 people had removed ticks with unprotected hands. Experts are associating such high tick activity with the dry,

hot weather. A preliminary diagnosis of CCHF was made of 165 people hospitalized in the region; that is 6 percent higher than the same indicator for last year. A total of 3866 persons applied for care due to tick bites, including 1512 children. It should be noted that the number of children with tick bites has increased 10 percent compared with last year. Experts and health officials have emphasized the importance of treating summer camps for children and other recreational areas with anti-tick solutions, as well as educating the population, particularly those working in yards and dealing with animals, about the methods of protection against ticks. (Viral hemorrhagic fevers are listed in Category A on the CDC list of Critical Biological Agents)\* Non-suspect case

## **AVIAN INFLUENZA-RELATED REPORTS**

**WHO update:** The WHO-confirmed global total of human cases of H5N1 avian influenza virus infection as of 15 June 2007 stands at 313, of which 191 have been fatal.

**AVIAN INFLUENZA, HUMAN (Viet Nam):** 21 Jun 2007, A 28-year-old Vietnamese woman died on Jun 21 of bird flu, Viet Nam's second victim of the H5N1 virus this month, a hospital official said. "She died early this morning of bird flu because her condition was too severe," said the official from the National Institute for Clinical Research of Tropical Diseases in Hanoi where the woman was treated. The hospital official said the patient, from the northern province of Ha Nam, was admitted 2 weeks ago and tests showed she was infected with the H5N1 virus. The woman had not eaten any poultry for 10 days before her infection but her family raised 16 chickens. Ducks had died for unknown reasons in her village, according to state media. Her home province of Ha Nam is one of the 16 provinces and 2 cities that have been hit by the deadly flu virus since it re-emerged in Viet Nam late last year. This week, Prime Minister Nguyen Tan Dung approved an order to import another batch of 200 million doses of vaccine to battle outbreaks in poultry. The Health Ministry had confirmed the woman's bird flu test result and 4 others, including the result of a 20-year old man from the northern province of Ha Tay, who died on Jun 10. The death of the woman raised Viet Nam's toll since late 2003 to 44 people out of 98 cases reported by health authorities. The World Health Organization has not confirmed the latest cases.

**AVIAN INFLUENZA, HUMAN, TAMIFLU RESISTANCE (Indonesia):** 22 Jun 2007, Roche Holding AG's Tamiflu, the antiviral drug stockpiled in the event of a pandemic, may be becoming a weaker weapon against bird flu in Indonesia, where the disease has killed the most people, a study showed. Laboratory tests on 6 samples of the H5N1 strain of avian influenza collected from poultry in Indonesia in 2005 showed they were between 15 and 30 times less sensitive to Tamiflu than a family of the viruses collected in Southeast Asia a year earlier. The study, led by Jennifer McKimm-Breschkin, a virologist at the Commonwealth Science and Industrial Research Organization in Melbourne, was presented at a conference in Toronto on Jun 21. "The decrease in drug sensitivity does not appear to be drug-induced, but may be due to "random mutations" that have occurred as the virus has circulated among birds, McKimm-Breschkin said in her presentation. Tamiflu is recommended by the World Health Organization as the first choice for doctors treating human cases of avian flu. Strains either resistant or less sensitive to Tamiflu have been linked to the deaths of at least 5 people in Viet Nam and Egypt, raising concern that the drug won't work effectively in the event of a pandemic. Supplies of Tamiflu that would cover two-thirds of a country's population may cut deaths from flu by half in the event of a pandemic, Roche said in a statement on Jun 22, citing a separate study presented at the flu conference in Toronto. Roche is collaborating with researchers to gauge resistance to Tamiflu, David Reddy, head of Roche's influenza task force, said. "Resistance should never be taken lightly. We need to constantly look at resistance," Reddy said. The change that has occurred in Indonesia's H5N1 strain "is still modest" and its sensitivity to Tamiflu can vary, he said. More studies are needed to determine whether a virus's sensitivity to Tamiflu in the laboratory is of any therapeutic significance, said Fred Hayden, a medical officer on the WHO influenza team in Geneva. "The pathogenesis of the infection in patients, how rapidly the virus is growing and, critically, when they present for care" are other variables that influence the drug's effectiveness, Hayden said.

**AVIAN INFLUENZA, HUMAN (Egypt):** 23 Jun 2007, A 4-year-old Egyptian boy has tested positive for the H5N1 bird flu virus, becoming the 37th human case in the Arab country, the official Middle East News Agency (MENA) reported on Jun 23. It quoted a health ministry statement identifying the boy as an inhabitant of the Upper Egyptian province of Qena. He was admitted to hospital in Qena on Jun 21 suffering high fever after being exposed to birds suspected of having bird flu, MENA quoted the ministry as saying. He was taken to a hospital in the capital Cairo and is in a stable condition. A total of 15 of Egypt's bird flu cases have proven fatal. This patient is the third human bird flu case from Qena over the past month after a lull of nearly 2 months. Egyptian officials had said they expected the virus to lie low during the hot summer, following the pattern it set last year after the initial outbreak in February 2006.

**AVIAN INFLUENZA, HUMAN (Indonesia):** 23 Jun 2007, A hospitalized Indonesian girl has tested positive for the virulent H5N1 bird flu virus after coming into contact with sick chickens, a health official said on Jun 23. The 3-year-old girl is being treated at a hospital in Pekanbaru, the provincial capital of Riau on Sumatra Island, said Nyoman Kandun, a senior Health Ministry official. The girl, who had contact with dead chickens, is the 101st confirmed human case of bird flu in Indonesia, Kandun said. Of those, 80 have died.

\*Cases and outbreaks will be cited for suspect level with regards to suspicion of BT threat. Therefore, cases and outbreaks will be categorized as "Determined BT", "Suspect" or "Non-suspect".

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**NOTE:** This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

Questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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